

2004 Electronic Toll Collection Survey

1. Total number of toll collection plazas operated

2. Total number of toll collection plazas with Electronic Toll Collection (ETC) capabilities

3. Total number of toll collection lanes

4. Total number of toll collection lanes with Electronic Toll Collection (ETC) capabilities

5. Are your tags used by other toll operators in your metropolitan area?

6. Please check the ITS standards that you are using (deployed or in current RFP) or considering (assessing for use) in your operational freeway management systems. If no standards are used, skip to the question 9.

Description	Using	Considering
ASTM E2259-03 -Standard Guidelines for Archiving		
ASTM E-17.54.02.1 Standard Specifications for Metadata Content for ITS-Generated Data		
ASTM E-17.54.02.2 Standard Specifications for Archiving ITS-Related Traffic Monitoring Data		
ITE 9603-1 - Application Programming Interface (API) Standard for the Advanced Transportation Controller (ATC)		
ITE 9603-2 - Advanced Transportation Controller (ATC) Cabinet		
ITE 9603-3 - Advanced Transportation Controller (ATC) Standard Specification for the Type 2070 Controller		
SAE J2354 - Message Set for Advanced Traveler Information System (ATIS)		
SAE J2540-2 - ITIS Phrase Lists (International Traveler Information Systems)		
SAE J2630 - Converting ATIS Message Standards from ASN.1 to XML		
ITE TM 1.03 - Standard for Functional Level Traffic Management Data Dictionary (TMDD)		
ITE TM 2.01 - Message Sets for External TMC Communication (MS/ETMCC)		
NTCIP 1602 - Generic Reference Model for C2C Communications		
ANSI TS284 - Commercial Vehicle Safety Reports		
ANSI TS285 - Commercial Vehicle Safety and Credentials Information Exchange		
ANSI TS286 - Commercial Vehicle Credentials		
IEEE 1609.1 - Standard for Dedicated Short Range Communications (DSRC) Resource Manager		

Description	Using	Considering
IEEE 1609-2 - Standard for Dedicated Short Range Communications (DSRC) Application Layer		
IEEE 1609.3 - Standard for IP Interface for Dedicated Short Range Communications (DSRC)		
IEEE 1609.4 - Standard for Dedicated Short Range Communications (DSRC) Medium Access Control (MAC) Layer		
E2213-02 Standard Specification for Telecommunications and Information Exchange Between Roadside and Vehicle Systems - 5 GHz Band Dedicated Short Range Communications (DSRC) Medium Access Control (MAC) and Physical Layer (PHY) Specifications		
SAE J2xxx - Standard for Data Dictionary and Message Sets for Dedicated Short Range Communications (DSRC)		
E2158-01 Standard Specification for Dedicated Short Range Communication (DSRC) Physical Layer using Microwave in the 902 to 928 MHz Band		
ASTM E17.54.00.1 - Standard Guidelines for Archiving ITS-Generated Data		
PS 105-99: Standard Provisional Specification for Dedicated Short Range Communication (DSRC) Data Link Layer		
NTCIP 1203 - Object Definitions for Dynamic Message Signs		
NTCIP 1204 - Object Definitions for Environmental Sensor Stations		
NTCIP 1205 - Objects for CCTV Camera Control		
NTCIP 1206 - Object Definitions for Data Collection and Monitoring (DCM) Devices		
NTCIP 1207 - Object Definitions for Ramp Meter Control		
NTCIP 1208 - Object Definitions for Video Switches		
NTCIP 1209 - Object Definitions for Transportation Sensor System		
NTCIP 1213 - Electrical and Lighting Mgmt System Interoperability & Intercommunications Std		
NTCIP 1301 - Weather Report Message Set for ESS		
IEEE 1512-2000 Standard for Common Incident Management Message Sets for use by Emergency Management Centers		
IEEE P1512.1 - Standard for Traffic Incident Management Message Sets for Use by EMCs		
IEEE P1512.2 - Standard for Public Safety Incident Management Message Sets for Use by EMCs		
IEEE 1512.3-2000 - Standard for Hazardous Material Incident Management Message Sets for Use by Emergency Management Centers		
IEEE 1512.4 - Standard for Emergency Management to Emergency Vehicle Subsystems Use by Emergency Management Centers		
IEEE P1556 - Standard for Security and Privacy of Vehicle/Roadside Communication Including Smart Card Comm.		
SAE J2266 - Location Referencing Message Specification		
NTCIP 1201 - Global Object Definitions		
NTCIP 1102 - Octet Encoding Rules (OER)		

Description	Using	Considering
NTCIP 1103 - Transportation Management Protocol		
NTCIP 1104 - CORBA Naming Convention Specification		
NTCIP 1105 - CORBA Security Service Specification		
NTCIP 1106 - CORBA Near-Real Time Data Service Specification		
NTCIP 2101 - Point to Multi-Point Protocol Using RS-232 Subnetwork Profile		
NTCIP 2102 - Subnetwork Profile for PMPP using FSK Modems		
NTCIP 2103 - Subnet Profile for Point-to-Point Protocol using RS 232		
NTCIP 2104 - Subnetwork Profile for Ethernet		
NTCIP 2201 - Transportation Transport Profile		
NTCIP 2202 - Transport Profile for Internet (TCP/IP and UDP)		
NTCIP 2301 - Application Profile for Simple Transportation Management Framework (STMF)		
NTCIP 2302 - Application Profile for Trivial File Transfer Protocol		
NTCIP 2303 - Application Profile for File Transfer Protocol (FTP)		
NTCIP 2304 - Application Profile for Data Exchange ASN.1 (DATEX)		
NTCIP 2305 - Application Profile for Common Object Request Broker Architecture (CORBA)		
NTCIP 8003 - Profiles - Framework and Classification of Profiles		
NTCIP 9010 - XML Standard for Center-to-Center Communications		
IEEE P1488 - IEEE Standard for Message Set Template for Intelligent Transportation Systems		
IEEE P1489 - IEEE Standard for Data Dictionaries for Intelligent Transportation Systems - Part 1 Functional Area Data Dictionaries		
APTA - TCIP Dialogs		
NTCIP 1400 - TCIP - Framework Standard		
NTCIP 1401 - TCIP - Common Public Transportation (CPT) Business Area Standard		
NTCIP 1402 - TCIP - Incident Management (IM) Business Area Standard		
NTCIP 1403 - TCIP - Passenger Information (PI) Business Area Standard		
NTCIP 1404 - TCIP - Scheduling/Runcutting (SCH) Business Area Standard		
NTCIP 1405 - TCIP - Spatial Representation (SP) Business Area Standard		
NTCIP 1406 - TCIP - Onboard (OB) Business Area Standard		
NTCIP 1407 - TCIP - Control Center (CC) Business Area Standard		
NTCIP 1408 - TCIP - Fare Collection (FC) Business Area Standard		
NTCIP 1202 - Object Definitions for Actuated Traffic Signal Controller Units		
NTCIP 1210 - Objects for Signal Systems Master		
NTCIP 1211 - Objects for Signal Control Priority		

7. What factors helped your agency decide to use ITS standards? Please pick top three factors, check only one item in each column.

- Options offered in the standards
- Products employ standards
- Regional architecture document requirements
- Additional funding provided
- Integration opportunities
- Consultant or integrator's recommendation
- My agency's participation on standard committees
- Training and Technical Assistance support provided by US DOT
- Responding to the rule to use ITS Standards
- Compliance testing is readily available

8. Do you feel that using the standards helped with the integration needs for your agency? Please list project name(s) next to each option.

- Absolutely
- Somewhat
- Not exactly

9. If no ITS standards are currently used, what factors will ensure that your agency uses ITS standards? Please pick top three factors, check only one item in each column (if you are using standards, please move to the next question).

- We are already committed to using standards when they are complete
- Vendors provide standard-compliant products
- Standards being accepted by the ITS community and being used in deployments
- Training and technical support being provided to my agency
- Standards are developed that apply to my system
- Additional funding being provided to use the standards
- Standards use enables interoperability of systems
- Other:

10. What tool, resource, or support mechanism was or would be most helpful for implementing the standards? Please pick top three, check only one item in each column.

- Training courses
- Published standards provided for free Published standards are easily available
- Support documents (i.e. procurement and implementation guides) are available
- Workshops
- Standards Web site
- Standards forum
- Software tools to assist with correctly specifying and procuring the standard
- E-mail bulletins
- Resource documents (i.e., user guides and reference notebooks)
- Testing tools
- Case studies of other similar projects that used standards successfully
- Other:

11. Who can we contact in your agency regarding ITS standards?

Name:

Affiliation:

Phone:

E-mail:

12. May FHWA follow up with this agency contact for possible peer networking?

Yes

No

13. Does your agency participate in a statewide disaster planning program?

Yes

No

Don't know

14. The U.S. DOT is interested in networking with evaluators of Intelligent Transportation Systems (ITS) nationwide. Is there a point of contact in your state for ITS evaluations?

Yes. Please provide the name, e-mail, and phone number:

No

Don't know

15. The U.S. DOT ITS JPO actively collects data on the benefits and costs of ITS implementations and makes this information available at the following URL: <http://www.benefitcost.its.dot.gov/>. Are you aware of any locally produced and funded evaluations that could be added to this national database?

Yes. Please provide a point of contact (name, phone number and e-mail) or reference (e.g., URL) for the evaluation report.

No

Don't know

16. Is your agency willing to share COST information on ITS-related equipment and projects (i.e., capital and O&M cost, project component breakdown, and brief description)? This information will be used to update the ITS JPO sponsored ITS costs database.

Yes. Please provide name, phone number, and e-mail of the cost information contact if different from respondent. This person will be contacted for the cost information at a later date.

No

17. Is your agency willing to share BENEFITS information from ITS deployments? This information will be used to update the ITS JPO sponsored ITS benefits database.

Yes. Please provide name and phone number of the benefits information contact if different from respondent. This person will be contacted for the benefits information at a later date.

No